

Injection of a Medium into Filter Segments

Patent Claims

1. A method for producing multi-segment filters in the tobacco-processing industry, wherein filter segments (1, 7) are delivered to a group of filter segments, characterized in that a medium (3) is introduced into the filter segments (1, 7) before they are delivered to the group of filter segments.
2. The method as defined in the preamble to claim 1, characterized in that a medium (3) is introduced into filter rods and that in a subsequent step, the filter rods are cut into filter segments (1).
3. The method according to claim 1 or 2, characterized in that the medium (3) is introduced into the filter rods or filter segments (1, 7) during the transport, in particular while positioned on a conveying drum or operating drum (18).
4. The method according to one of the claims 1 to 3, characterized in that the filter rods or filter segments (1, 7) are held in place before the medium (3) is introduced.
5. The method according to one or several of the claims 1 to 4, characterized in that a predetermined amount of the medium (3) is introduced.

6. The method according to one or several of the claims 1 to 5, characterized in that the medium (3) is introduced by injecting it with an element (5), preferably a spray needle (5), into the filter segment (1, 7) or the filter rods.

7. The method according to one or several of the claims 1 to 5, characterized in that the medium (3) is introduced by means of an element (2), preferably a spray nozzle (2), from the outside into the filter segment (1, 7) or the filter rods.

8. The method according to one or several of the claims 1 to 7, characterized in that the medium (3) is introduced parallel to the longitudinal axial direction of the filter segments (1, 7) or the filter rods.

9. The method according to one or several of the claims 1 to 8, characterized in that the medium (3) is introduced into at least one hollow space, preferably in a multifilter segment or a multifilter rod.

10. A module (10) for a multi-segment filter maker in the tobacco-processing industry, wherein filter segments (1, 7) can be delivered to a group of filter segments, characterized in that a device is provided for introducing a medium (3) into the filter segments (1, 7).

11. The module (10) as defined in the preamble to claim 10, characterized in that it comprises a device for introducing a medium (3) into filter rods, as well as a cutting device for cutting the filter rods into filter segments (1, 7).
12. The module (10) according to claim 10 or 11, characterized in that the device forms a part of a conveying means, in particular a conveying drum or an operating drum (18).
13. The module (10) according to one of the claims 10 to 12, characterized in that it comprises a holding element (4) for holding the filter rods or the filter segments (1, 7).
14. The module (10) according to one or several of the claims 10 to 13, characterized in that the device is provided with an injection element, preferably a spray nozzle (2) or a spray needle (5).
15. The module (10) according to claim 14, characterized in that the injection element can be subjected to pressure, preferably by means of a compressed-air source or a piston.
16. The module (10) according to one or several of the claims 10 to 15, characterized in that a metering device is provided for the medium (3).

17. A multi-segment filter maker in the tobacco-processing industry, comprising a device as defined in one or several of the claims 10 to 16.